DECISION RECORD

Decision: It is my decision to authorize the issuance of a term grazing permit/lease of public lands on the Tom Southard Ranch, Allotment #65016. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed treatment were considered and any necessary changes have been incorporated into the environmental assessment.

Signed by T. R. Kreager — 6/23/99
Assistant Field Manager — Date

Environmental Assessment for Grazing Allotment 65016

I. Background

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A. Introduction

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing lease on Allotment 65016.

The scope of this environmental assessment is limited to the effects of issuing a new grazing lease on Allotment 65016. Over time, the need could arise for subsequent management activities which relate to grazing authorization. These activities could include vegetation treatments (e.g., prescribed fires, herbicide projects), range improvement projects (e.g., fences, water developments), and others. Future management actions related to livestock grazing would be addressed in project-specific NEPA documents as they are proposed.

B. Purpose and Need for the Proposed Action

The purpose of issuing a new grazing lease would be to authorize livestock grazing on public range on Allotment 65016. The lease would be needed to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, and 4130.3-2.

C. Conformance with Land Use Planning

Upon review of the Roswell Resource Management Plan/Environmental Impact Statement (Bureau of Land Management 1997), the proposed action was found to conform with the Record of Decision as required by 43 CFR 1610.5-5.

D. Relationships to Statutes, Regulations, or Other Plans

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

II. Proposed Action and Alternatives

A. Proposed Action:

The proposed action is to authorize the grazing lease on the Tom Southard allotment #65016 for 117 AUMs at 100% public land, with 27 AUMs suspended. Specifically, to authorize a grazing lease for 9 cows from March 1 to the last day of February of each year at 100% public land and continuing current livestock management practices.

B. Change livestock management and/or Numbers alternative:

Alternative number 1:

> Continue current livestock management practices and reinstate the 27 suspended AUMs.

C. No Permit/Lease authorization alternative:

This alternative, if selected, would be to not issue a new grazing lease for allotment #65016. No grazing would be authorized on federal land under this alternative..

III. Affected Environment

General Setting

Allotment #65016 is located in Chaves County, about ten miles south of Kenna. The allotment consists of one pastures. The one pasture on this allotment contains 960 acres of Federal land, 640 acres of State Land, approximately 1260 acres of private land and 320 acres of uncontrolled land. Currently this allotment is categorized as a “C” or custodial allotment.

The public lands within this allotment are for the most part accessible by gravel roads. There are two windmills on private land, with a pipeline extending west onto Federal land in Section 34. The Federal land (Section 11) in the southern end of the pasture is watered by dirt tanks.

The permitted use on Section 15 Leases is established by the amount of forage produced on the public lands within the lease. The overall livestock numbers on the allotment are not established by the Bureau of Land Management. In southeast New Mexico, this is due primarily to either the small amount of public land and/or the public lands are situated in small or isolated tracts that can not be managed as efficiently as larger well blocked public lands.

The primary features in the shinnery oak dune community are topography influenced by aeolian and alluvial sedimentation on upland plains forming hummocks, dunes, sand ridges and swales and the presence of shinnery oak.

This is a unique community type found primarily below the Llano Estacado or Staked Plains, in an area known as Mescalero Sands. It lies in the Canadian Plains and Southern Desert ecosystem between the elevations of 4,100 feet and 4,300 feet. The topography is gently sloping and undulating sandy plains, with moderate to very steep hummocky dunes of up to ten feet and more in height scattered throughout the area. Some of the dunes are stabilized with vegetation, while a number of them are unstable and shifting. Dune blowouts with shinnery oak and bluestem, either isolated or in dune complexes are common in this community. Annual precipitation for this region averages 12 -13 inches.

.The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment #65013; Prime/Unique Farmland, Cultural Resources, Native American Religious Concerns, Wild and Scenic Rivers, Hazardous Wastes, water quality, riparian/wetlands, floodplains, Areas of Critical Environmental Concern, and Minority/low Income populations.

Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities except where criteria to exempt surveys are met. Eligible and potential eligible sites would continue to be protected from damage or archaeologically treated to mitigate damage**.**

The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

A. Affected Resources

1. Soils: The two primary soil units on this ranch are the Roswell-Jalmar fine sands association and the Faskin-fine sands association.

Roswell-Jalmar fine sands

Soils are 60% Roswell fine sand and 35% Jalmar fine sand. The Roswell soil is on hummocky sand dunes and the Jalmar soil is in depressional areas. Permeability of the Roswell soil is rapid, water capacity is low, runoff is slow, while the soil blowing hazard is very high. Permeability of the Jalmar soil is moderate, water capacity is moderate, runoff is slow, while the soil blowing hazard is very high.

Faskin fine sands

Permeability of this soil is moderate, water capacity is high, runoff is medium, while the soil blowing hazard is very high.

2. Vegetation:

The primary ecological (range) site on this allotment is Deep Sand CP-2. Key vegetation is shinnery oak with bluestem and dropseed grasses. The Deep Sand community is a unique ecological area dominated by tall and mid-grasses. In many areas, the shinnery oak community has shifted from a dominant sand bluestem/little bluestem/hairy grama grassland with varying amounts of shinnery oak, sand sage and yucca to a community dominated by sand dropseed, red and purple three-awn and hairy grama, with increasing annual forbs, shinnery oak, mesquite, sand sage and yucca. Currently, the Roswell Field Office (RFO) has limited vegetative data for this allotment because of the allotment categorization. There have been no vegetative monitoring studies done on this allotment since the initial vegetation inventory completed in 1979. Data at that time placed the public lands within the low-good ecological rating at 56%.

The RMP/EIS established resource objectives for the Shinnery Oak Dune community. The vegetative cover by percent composition objectives for the SOD community are grasses 50 - 70 %, forbs 10 - 15 %, shrubs & trees 25 - 40 %. The ground cover objectives for this community are: bare ground 5 - 20 %, litter 25 - 70 %, small & large rock 0 - 1 %, grass & forbs 16 - 40 % and shrubs & trees 3 - 17 %.

No monitoring studies were established on this allotment because of its total size (one pasture) and its placement in the custodial ("C") category. Recent field review of the public lands on this allotment compared the existing ground cover to the average ground cover for a Deep Sand CP-2 ecological site in good condition. Average vegetative production composition is a little over 4 % forbs, 57 % grasses and 39 % shrubs and trees. The average vegetative cover composition is 1 % forbs, 68 % grass, 29 % shrubs and 2% trees. The average ground cover composition for this site is approximately 45 % bare ground, 32 % litter, less than 1% rock, 14% grass and forb and 8% shrub and trees.

The field review reflects the grass component is dominated by bluestems, threeawns, dropseeds, black and hairy grama and a lesser amount of sand paspalum and fall witchgrass; the shrub component is dominated by shinnery oak, sand sage, yucca and some mesquite; the forb component is comprised of a variety of both annual and perennial species.

The current vegetative resources on this allotment appear to be stable and the rangeland trend is static. The data used for this assessment is available at the Roswell Field Office.

3. Wildlife:

The Caprock Wildlife Habitat Area (WHA) includes the Coombes Allotment.(65016). The Caprock WHA provides diverse habitat for more than 54 birds species, 33 species of mammals, and 36 species of reptiles and amphibians.

Raptors that are frequently associated with the vegetation types on this allotment are the red-

tailed hawk, swainson's hawk, ferruginous hawk, roughlegged hawk, common nighthawk, and the american kestrel.

Game bird species in this areas include the lesser prairie chicken, scaled and bob white quail, and the mourning dove.

Other bird species that are usually observed are the turkey vulture, roadrunner, chihuahuan raven, great-horned owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, horned lark, and other passerine birds.

At least 33 species of mammals occur on or utilize this allotment. The diversity of small mammals provide for an excellent prey base for carnivores such as the coyote, gray fox, bobcat, raccoon, badger, hooded skunk and striped skunk.

Mammals that provide a prey base include the black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mice, deer mouse, kangaroo rats, northern grasshopper mouse, harvest mice, and the white throated woodrat.

Two big game species that occur the allotment are pronghorn antelope and mule deer.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixlined racerunner, tree lizard, skinks, western diamond back, western rattlesnake, coachwhip, spadefoot toads, western box turtle, and the yellow mud turtle.

4. Threatened/Endangered Species

Federal threatened, endangered and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document.

There are no known Federal threatened and endangered species or critical habitat within the allotment.

However, there are several Federal Candidate and State listed species that occupy or utilize the area. These include the swift fox, mountain plover, lesser prairie chicken and the Sand Dune lizard. For a detailed description of the range, habitats, and potential threats to the swift fox and the mountain plover, refer to the Biological Opinion (AP11-38) in There are no known federally threatened or endangered species occurring within the proposed action area.

Special Status Species:

Sand Dune Lizard

The State Threatened sand dune lizard only occurs in the southeastern corner of New Mexico and the western region of Texas. Within that range its habitat is restricted to active sand dunes and their peripheries (Degenhardt and Jones 1972). Shinnery oak is the dominate plant species that surrounds the top edge of the active sand dune, with a small composition of grasses inside the blowout area.

During 1991 a study was begun to examine the effects of the removal of shinnery oak on lizard habitat. Through five years of research it was demonstrated that there were 70%-94% fewer lizards in treated pastures as compared to non-treated pastures. As a result, the use of herbicides within suitable sand dune lizard habitat (blowouts) will be avoided.

Lesser Prairie Chicken

Recently a petition was filed with the U. S. Fish and Wildlife Service (FWS) to list the prairie chicken as threatened. On June 1, 1998 the FWS announced a finding for the petition. After review of all available scientific and commercial information, the Service finds that listing this species is warranted but precluded by other higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. The lesser prairie chicken is added to the Service's candidate species list.

In southeastern New Mexico, lesser prairie chickens exist in the shrub-dominated High Plains Bluestem Subtype by using mixed stands of tall grass and shinnery oak.

Male prairie chickens visit or establish booming grounds (leks) from early March to late May, with the peak booming activity occurring around the middle of April. Booming grounds can be found in mesquite shortgrass, shinnery oak grasslands, shinnery oak dunes, abandoned oil/gas pads, pipelines and roads. The basic requirement for lek sites is visibility of the immediate surroundings (shortgrass and topography)..

Female prairie chickens prefer range in excellent condition for nesting. In areas of shinnery oak, nesting studies (Copelin 1963, Riley 1978) indicate that these birds prefer shinnery oak rangeland habitat dominated by mid and tall grass species. Wisdom (1980) demonstrated that nesting success was enhanced by the presence of tall, wide clumps of sand bluestem, which are found in a few near-climax areas in the shinnery oak-grassland, while areas devoid of sand bluestem were not highly conducive to nesting success. In areas where sand bluestem is scarce, little bluestem apparently serves as an acceptable substitute Merchant (1982). Riley et al. (1992) found that most successful nests occurred where basal composition of sand bluestem was greater and the height of vegetation above successful nests averaged 67 cm, while height of vegetation above unsuccessful nests averaged 35 cm. Copelin (1963) found that the most successful nests were placed between clumps of grass residue left from the previous year's growth that provided overhead cover.

Brooding areas are often within habitats which are in lower seral stages usually having a high

proportion of bare ground and annual forbs (Riley et al. 1992, Jones 1963).

Food requirements vary among the seasons. Prairie chickens rely heavily (97%) on forbs and other green plant material during the spring and invertebrates in the summer. The early fall diets consist of invertebrates and green plant material, while winter diets consist of mast from shinnery oak.

Above is a general description of prairie chicken habitat requirements. As with most wildlife species, especially upland game birds, precipitation plays a large role in population fluctuations and habitat conditions. Precipitation patterns have fluctuated drastically for the last twenty years. During the middle eighties precipitation was above normal and chicken populations responded very well. Except of two years, precipitation has been well below normal during the 1990's.

Current lesser prairie chicken habitat within the allotment is in fair condition (marginal Subtype 2). Most of the bluestems that would provide some nesting habitat are located on private land. Mono-typic stands of shinnery and deeper sandhills exist in the northwestern part of the allotment. Most of the public land lies within this large pasture and would be considered a subytpe 3 according to the habitat descriptions in the Davis study.

Population Monitoring Data

The Roswell Field Office has actively monitored prairie chicken booming grounds, population trends and habitat since the early seventies. Historically in New Mexico, the LPC occupied most of the eastern plains. However, numbers and occupied range of the species are much reduced since pre-settlement times; apparently in response to prolonged heavy grazing and brush control in combination with the great drouths of the 1930's and 1950's. It has been reported that currently the LPC occupies approximately one half their original range in New Mexico.

Since the early 1970's LPC populations have fluctuated up and down with the highest period occurring during the middle 1980's. On this specific allotment 3 known booming grounds have been documented and monitored for over 25 years. There is another booming ground located approximately 200 yards across the fence in section 3 that could be affected by the management of this allotment. Along with the LPC populations, lek activity has fluctuated over the years. In 1982, when the population was sustaining higher numbers, 3 out of the 4 booming grounds were active with an average number of 10 males per lek. Since that time lek activity has declined. For the last few years, one of the leks has remained active with an average number of 5 males per lek.

5. Livestock Management:

The allotment is grazed by cattle. As was stated earlier the BLM does not normally set the total livestock numbers for a Section 15 Lease. The present lease agreement with the land owner

is for 3 bulls with 80 cows or 160 yearlings at any given time (per lease filed with BLM), however, the leasee only runs 60 AUs on the allotment. In shinnery oak dominated pastures livestock are removed during the period that shinnery is toxic, normally mid March and April, to prevent livestock loss. The leasee on this allotment does not remove the herd during the shinnery toxic period, but feeds supplemental hay.

6. Visual Resources:

The allotment is located in a Class IV Visual Management Area. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. Air Quality:

The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act, which allows a minor amount of air quality degradation. Air quality is generally good, Winds are typically southeasterly during the summer, and becoming southwesterly in the winter and early spring. Winds average 10 miles per hour in the fall and 16 miles per hour in the spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in the region.

8. Recreation:

Recreation opportunities are not limited in this grazing allotment because the public has legal and physical access to the public lands. However, the parcels of public lands within this allotment are scattered and are generally surrounded by private lands. The primary recreational activity occurring in this area is hunting. Mule deer, pronghorn antelope, and game birds are taken during hunting seasons set forth by the New Mexico Department of Game and Fish.

Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

9. Caves and Karst**:**

A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. Presently, no known significant caves or karst features have been identified within this allotment. If at a later date, a significant cave or karst feature is located on public lands within this allotment, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental analysis would be prepared to construct this exclosure fence.

This allotment is located within a designated area of Low Karst or Cave Potential.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soils:

The permitted use as described in the proposed action is not anticipated to have any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region during parts of the year. If vegetative cover remains stable soil loss may be minimized.

Changes in vegetative ground cover is often linked to the amount and timing of precipitation events. This assessment is based on the assumption that the area will receive at least the long term average in precipitation both in timing and amount.

2. Vegetation:

The continuance of the permitted use at the current use levels authorized by the expiring lease is not anticipated to have any adverse impact to the current vegetative conditions. The vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores such as well rabbits, rodents and insects. Under the proposed action , it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. The pastures will continue to get some deferment as outlined in the affected environment. Ecological condition and trend is expected to remain stable over the long term at this permit number.

3. Wildlife:

Under the proposed action, wildlife will continue to compete with domestic livestock for space, forage and browse. With proper livestock management and carrying capacities, there will be adequate cover and forage for wildlife species; resulting in sustainable wildlife populations for those species that occupy or utilize the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

4. Threatened/Endangered Species:

Under the proposed action there would be no affect to Federal threatened and endangered species since there are no known T/E occurrences within this allotment.

Special Status Species:

Under the proposed action, there would be minimal impacts to the sand dune lizard due to the dispersal of livestock. Areas where there is a concentration of livestock (waterings and fence corners) the habitat may be of lower quality, but these areas are small in nature. Range improvements (pipelines) may enhance lizard habitat by creating open dunal areas that are usually bordered by shinnery oak.

Under the proposed action, lesser prairie chicken habitat would continue to be maintained and enhanced since the current permitted livestock numbers are below carrying capacities set forth from past monitoring studies. Vegetative composition and utilization levels on key grass species are such that the allotment provides most if not all of the habitat requirements needed for lesser prairie chickens.

5 Livestock Management:

Under the proposed action there would be no impacts to the current livestock management. The allotment would continue to be grazed in the same manner as it is currently. It would also be anticipated that this area would continue to have periodic deferment during other periods of the year.

6. Visual Resources:

The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

7. Air Quality:

The impacts to air quality would not change from the current situation. A minor amount of air quality degradation would continue.

8. Recreation:

Grazing would have little or no affect on the recreational opportunities. Legal access to this parcel of public land would still remain available. Recreation activities that could occur within this grazing allotment are limited however due to land patterns.

9. Significant Caves/Karst

No known significant caves or karst features are known to exist on the public lands located within this allotment. Grazing would not affect the karst resources.

B. Impacts from the Change Livestock Management/Numbers alternative

Reinstatement of the 27 suspended AUMs will have minimal impacts to the vegetative resources, and especially those vegetative resources needed for special status species. There would be no appreciable impact to wildlife, visual resources , air quality or recreation opportunities on the allotment.

C. Impacts of the No Livestock Grazing Alternative.

The No Livestock Grazing Alternative has been previously analyzed at the National level in the Rangeland Reform '94 EIS and in the Roswell RMP/EIS. An in depth analysis of this alternative will not be made in this document. General impacts under this alternative would include no new rangeland improvement and the removal of existing rangeland improvements unless a determination was made that they were beneficial to other uses. Since no grazing authorizations on public lands would be permitted, livestock operators grazing lands adjoining Federal lands would be responsible for preventing the unauthorized use of these Federal lands. The BLM would not fence these lands. Rangeland administrative emphasis would shift to issuing crossing permits to or from nonfederal land inholdings and resolving unauthorized use.

V. Cumulative Impacts

Cumulative impacts of the grazing and no grazing alternatives were considered in Chapter 4 of Rangeland Reform `94 Draft Environmental Impact Statement and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document.

On the allotment specific level, there will be no cumulatively significant impacts from the proposed action /alternatives or from the no grazing alternative.

VI. Residual Impacts

The area has been grazed by livestock since the early part of the 1900's if not longer. Recent vegetative monitoring studies have shown that grazing , at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action

VII. Mitigating Measures And/Or Permit/Lease Conditions

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.